# AMENDEMENTS TO THE CLAIMS

## Claims 1-11 (Canceled)

- 12. (Currently amended) A method of identifying an agent capable of modulating increased coordination or increased agility associated with disruption of NPY6 receptor, the method comprising:
  - (a) providing a transgenic mouse comprising a homozygous disruption in a NPY6 receptor gene, wherein the transgenic mouse <u>lacks production of functional NPY6</u> protein and exhibits, relative to a wild-type mouse, increased coordination or increased agility;
  - (b) administering a putative agent to the transgenic mouse; and
  - determining whether the increased coordination or increased agility is modulated by the putative agent, thereby identifying an agent capable of modulating increased coordination or increased agility.

### Claims 13-20 (Canceled)

21. (Currently amended) A transgenic mouse comprising a disruption in an endogenous NPY6 gene-that results in loss of function of NPY6, wherein where the disruption is homozygous, the transgenic mouse <u>lacks production of functional NPY6 protein and exhibits</u>, relative to a wild-type mouse, increased coordination or increased agility.

#### 22. (Canceled)

23. (Previously amended) The transgenic mouse of claim 21, wherein the increased coordination or increased agility is characterized by an increased latency to fall off of an accelerating rotarod.

### 24. (Canceled)

25. (Currently amended) A method of producing a transgenic mouse comprising a disruption in an endogenous NPY6 gene, the method comprising:

- (a) introducing an NPY6 gene targeting vector into a murine embryonic stem cell;
- (b) introducing the cell into a blastocyst;
- (c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
- (d) breeding the chimeric mouse to produce the transgenic mouse,
  wherein the disruption results in loss of function of NPY6 and, where the disruption is homozygous, the mouse lacks production of functional NPY6 protein and exhibits, relative to a wild-type mouse, increased coordination or increased agility.

Claims 26-30 (Canceled)